

SPL Overview, NDC Labeler Code, Domestic & Foreign Establishment Registration

SPL Release Four Training Session – Module 1

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Transition from Paper to Electronic Drug Establishment Registration & Drug Listing

- Changes in FD&C Act require electronic registration of drug establishments and listing of human prescription drugs, OTC, animal drug, biologic products – September 2007
- Final guidance document for electronic drug establishment registration and listing – May 2009
- FDA is adopting the use of extensible markup language (XML) files in SPL format as the standard format for the exchange of drug establishment registration and drug listing information.

Transitioning from Paper to Electronic: Drug Registration and Listing

- No more **PAPER** drug registration and drug listing as of June 1, 2009 (unless waiver)
 - Form 2656 – NDC Labeler Code & Establishment Registration – replaced with
 - NDC Labeler Code SPL
 - Establishment Registration SPL
 - Form 2657 – Drug Product Listing & Form 2658 – Private Labeler Distributor – replaced with
 - Content of Labeling/Listing SPL

Introduction to SPL

The Standard:

Structured Product Labeling (SPL)

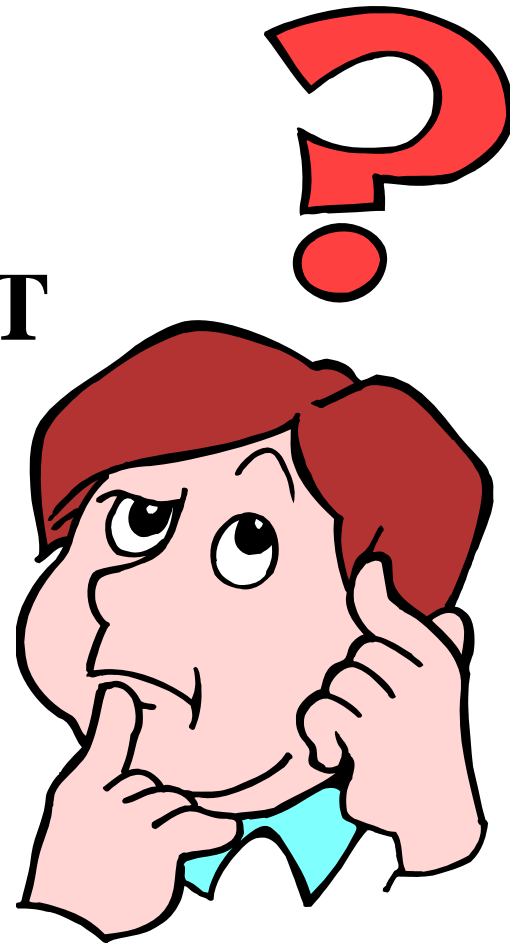
SPL Standard

- The Structured Product Labeling (SPL) is a document markup standard approved by Health Level Seven (HL7) and adopted by FDA as a mechanism for exchanging product information.
- American National Standards Institute (ANSI) accredited (SPL Release 4) – March 2009
- SPL is created using **EX**tensible **M**arkup **L**anguage

XML & XSL Stylesheet

- XML – **EX**tensible **M**arkup **L**anguage
 - Relatively human-legible
 - Machine readable
 - Tags (elements) permit search of key information
- XML Documents – created via Notepad, Word Pad, XML validation tools, Xforms, etc...
- XSL Stylesheet – transforms the XML data to be viewed via web browser or printed documents

**WHY CHANGE
THE DRUG LISTING
AND ESTABLISHMENT
REGISTRATION
PROCESS THAT HAS
WORKED FOR
DECADES ????**



- Eliminate duplicative and redundant data entry
- Eliminate paper submissions
- Automate processing of data in a submission type in electronic format in a manner that FDA can adequately process, review, and archive.

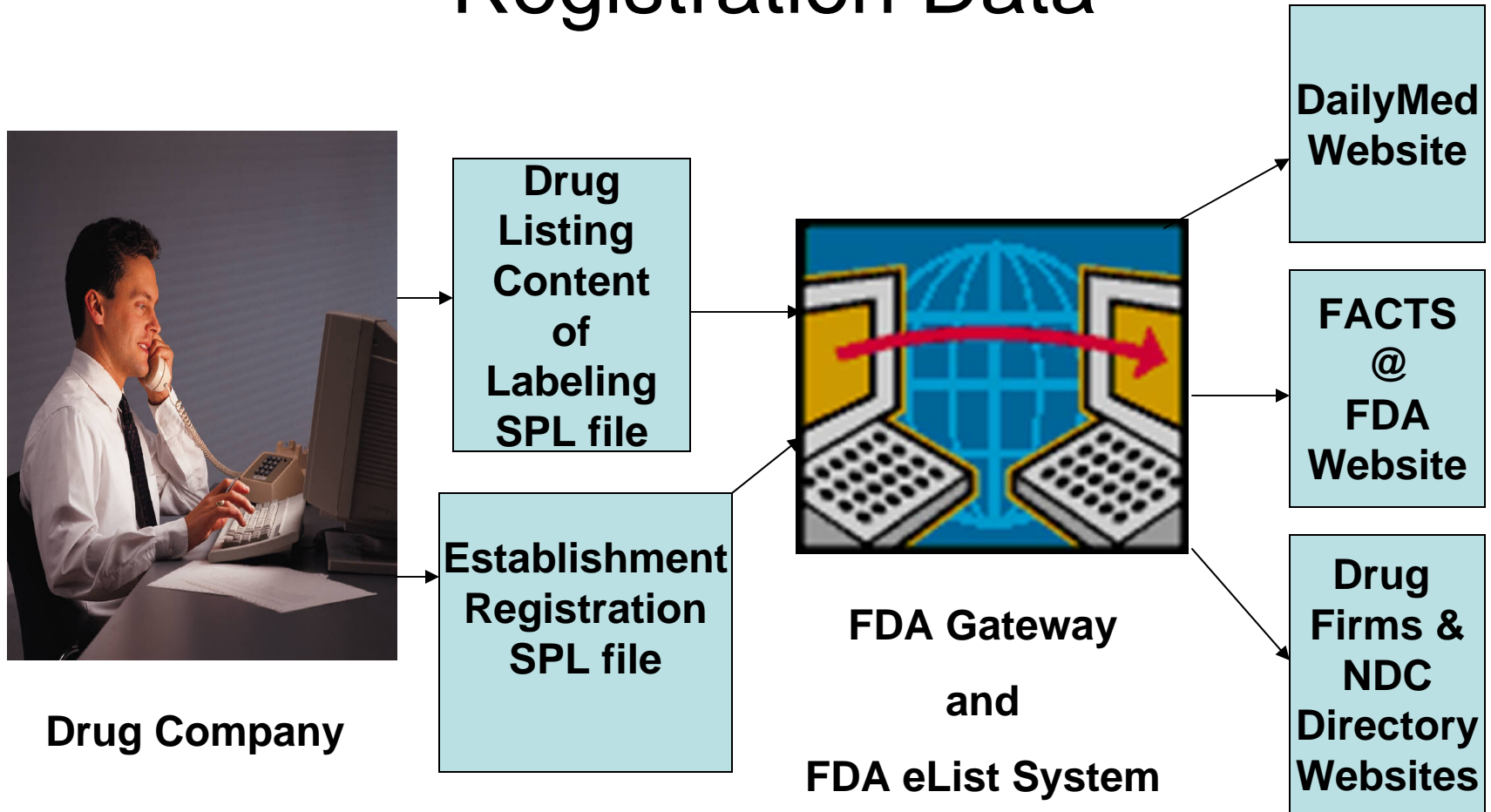
Benefits of Electronic Registration and Listing

- Electronic registration and listing process is more efficient and effective for industry and the Agency
- Accurate, up-to-date inventory of marketed drugs
- Eliminates data entry errors
- Well formed and properly created SPL files can be processed in minutes
- Use existing technology and data standard – **SPL (Used by FDA (CDER) since 2004)(Required by CDER in 2005)**
- Standard was updated to SPL R4 to include data elements needed to register drug establishments and list drug products

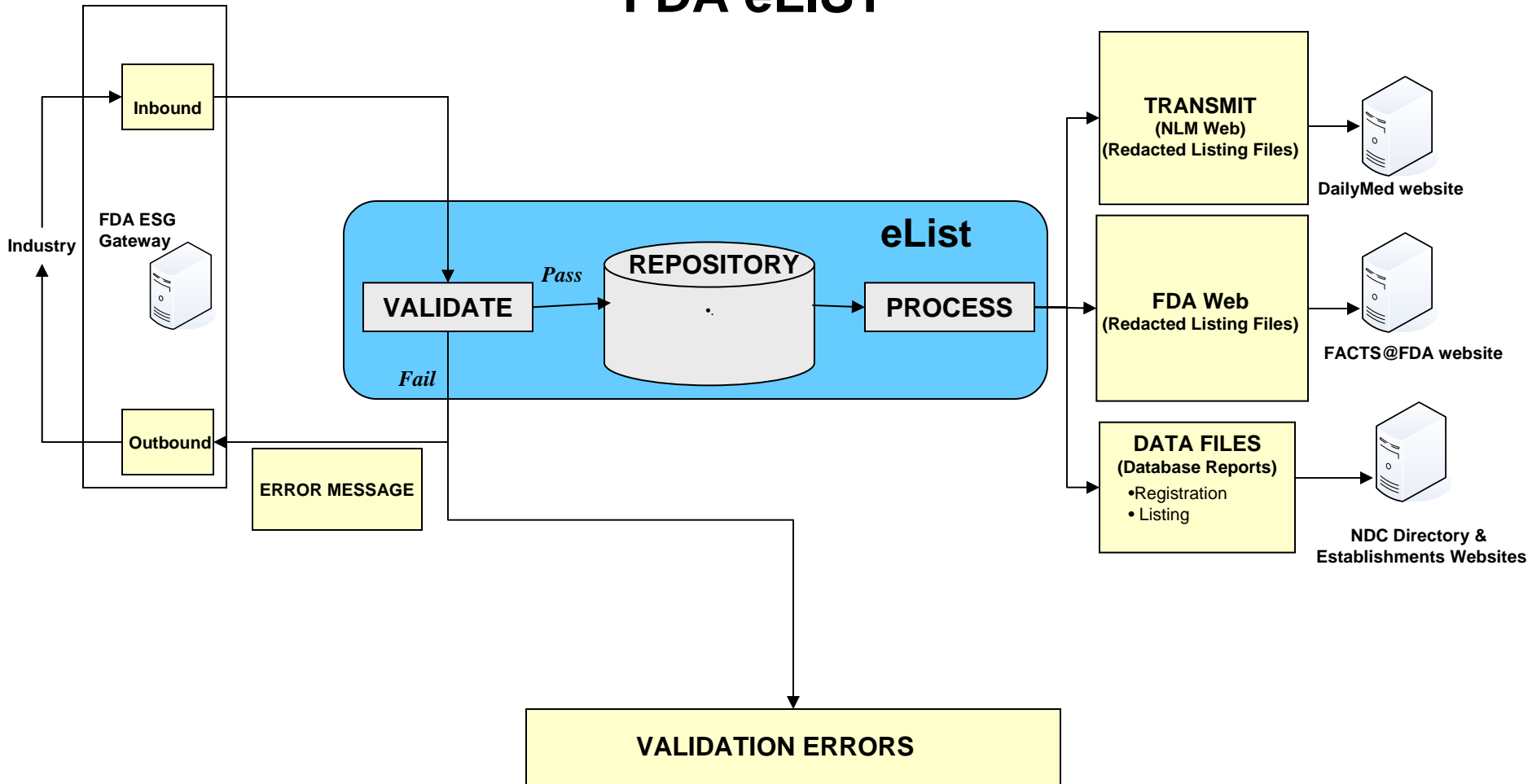
More Benefits of Electronic Registration and Listing

- Data maintenance
 - Content of Labeling and listing information in one file.
 - Registrant can list all it's establishments in one file.
 - Update information – Use one file instead of creating several paper forms and resubmit.
- Eliminates the use of paper forms for listing and registration
- 24-hour submission window – FDA Gateway
- Manage data using same source (files) as FDA
- Reduces the amount of time for FDA to receive and process your information.

You Control the Published Electronic Drug Listing and Establishment Registration Data



FDA eLIST



...three e-Files for Registration & Listing – SPL Format

- NDC Labeler Code Request
- Establishment Registration
- Content of labeling (CoL)/Listing

Order of Submissions

1. NDC Labeler Request (LCR) and Establishment Registration (ER) SPL
 2. CoL/Listing SPL
- CoL/Listing validates against data submitted in NDC LCR and ER SPL

NDC Labeler Code

Administrative (Document Tracking Information)

Basic information to identify the SPL document:

- **Document ID:** is a Globally Unique Identifier (GUID) and is unique for each version of the document. Letters used in a GUID are lower case.
- **Document Type:** The `<code>` is the LOINC code which provides information on the document type.
- **Effective Time:** provides a date reference to the SPL version including the year, month and day as yyyyymmdd.
- **SetID:** is a GUID and is a unique identifier for the document that remains constant through all versions/revisions of the document.
- **Version number:** is an integer greater than zero that provides a sequence to the versions of the document.

NDC Labeler Code Request Data

- **Document Information**

- Type of document
- ID
- Set ID
- Version Number
- Effective Time

- **Labeler**

- Name
- DUNS Number
- NDC Labeler Code

- **Contact**

- Name
- Mailing Address
- City
- State
- Country
- Postal Code
- Telephone Number
- Email Address

NDC Labeler Code Request Xforms View

HL7 SPL - NDC Labeler Code Request v 0.71	
<div>Open Save As Save</div>	
<div>NDC Labeler Code Request Preview</div>	
Document Information	
Type of document	NDC LABELER CODE REQUEST
ID	3267a844-378f-4020-912b-43babb77001d
Set ID	8d24aab5-8f91-42ca-9637-997a3d223e5c
Version Number	1
Effective Time	20080909
example(YYYYMMDD)	
Labeler	
Name	Acme Pharmaceuticals, Inc
DUNS Number	111119999
NDC Labeler Code	44444
<div>Add NDC Labeler Code Delete NDC Labeler Code</div>	
Contact	
Name	Charles Daniels
Mailing Address	44 Pembroke Drive
City	Rockville
State	MD
Country	USA
Postal Code	20888
Telephone Number	tel:+1-888-888-4757
Email Address	mailto:charles.daniels@acme-pharmaceuticals
example(tel:+1-201-555-1212) example(mailto:xportal@globalsubmit.com)	

NDC Labeler Code Request SPL Document

Acme Pharmaceuticals, Inc

Product Information	
Product Type	NDC LABELER CODE REQUEST

Labeler - Acme Pharmaceuticals, Inc (111119999) NDC Labeler Code: 44444			
Contact	Address	Telephone Number	Email Address
Charles Daniels	Address: 44 Pembroke Drive City, State, Zip: Rockville , MD, 20888 Country: USA	+1-888-888-4757	charles.daniels@acme-pharmaceuticals.com

Revised: 09/2008

Acme Pharmaceuticals, Inc

NDC LCR SPL Scenarios

- **Requesting a new NDC Labeler Code**
 - Fill out the *NDC Labeler Code request* as described in sections 2.1 through 2.4 leaving the NDC Labeler Code field empty.
 - Requests for NDC Labeler Codes are individually evaluated prior to entry into the NDC System. The initial request will be automatically stopped because there is no NDC Labeler Code provided and is diverted to a FDA reviewer. Once the evaluation is completed, the response to the request is directed to the designated contact person.
 - Once the NDC Labeler Code is assigned, open the original SPL file and add the newly assigned NDC Labeler Code and resubmit the corrected file.
- **Initial electronic submission when NDC Labeler Code already assigned**
 - Fill out the *NDC Labeler Code request*. Only one NDC Labeler Code is included in an SPL file. In other words, use a different setId root for each NDC Labeler Code request.

NDC LCR SPL

Scenarios cont...

- **Correct SPL file validation error**
 - If an SPL file cannot be processed because of a validation error, a report on the validation error is sent from FDA to the contact person. Open the SPL file and correct the errors.
- **Correct a mistake in an SPL file just submitted**
 - Open the SPL file, correct the mistake, and fill in a **new id root** and **new version number** with the **original setId root** and the appropriate effective time.

NDC LCR SPL

Scenarios cont...

- **Update the NDC Labeler Code information**
 - Open the previous SPL file and fill in the new information without changing the other existing information. Fill in a **new id root** and **new version number** with the **original setld root** and the appropriate effective time.
- **Requesting a second NDC Labeler Code**
 - Only one NDC Labeler Code is associated with each *NDC Labeler Code request*. If a second NDC Labeler Code is requested, fill out a separate SPL file with a **different setld root**. The labeler information and contact information is the same as the SPL file for the first NDC Labeler Code request

Notes

- Use NDC Labeler Code used in NDC Package Code (3-segment NDC)
- Submit NDC labeler codes that are used in NDCs associated with distributed products. (NDC on packaging)
- Only one NDC labeler code per NDC Labeler Code Request.
- NDC Labeler Code – Code should be identical to first segment of NDC (no leading zeros)

Establishment Registration

eRegistration of Drug Establishments

- Each Registrant (owner/operator firm) must submit one SPL file with registration information for all of its facilities (unlimited amount of domestic or foreign establishments per file)
- Updates of information require re-submission of the same updated SPL file (i.e., same setID; at least annually)
- Simplified SPL files are submitted for 'No Change' or 'Out of Business' notification

Registration Number

“FDA intends to use the Data Universal Numbering System (D-U-N-S®) as the registration number for the electronic system. Therefore, to facilitate and expedite processing of the SPL file, the registrant should submit their D-U-N-S® Number with the registration information. If the business entity does not submit a D-U-N-S® Number with its submission, FDA intends to make arrangements for obtaining a D-U-N-S® Number for that entity. An explanation of the D-U-N-S® Number and how to obtain one is described in section IV.B of this document.”

- ***from final “eList” guidance document.

Administrative (Document Tracking Information)

Basic information to identify the SPL document:

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- **Document Type:** The `<code>` is the LOINC code which provides information on the document type.
- **Effective Time:** provides a date reference to the SPL version including the year, month and day as yyyyymmdd.
- **SetID:** is a GUID and is a unique identifier for the document that remains constant through all versions/revisions of the document.
- **Version number:** is an integer greater than zero that provides a sequence to the versions of the document.

Establishment Registration Data

- **Document Information**

- Type of Document
- ID
- Set ID
- Version Number
- Effective Time

- **Registrant**

- Name
- DUNS Number

- **Registrant Contact**

- Name
- Mailing Address
- City
- State
- Country
- Postal Code
- Telephone Number
- Email Address

Establishment Registration Data (cont...)

- **Establishment**
 - Name
 - DUNS Number
 - FEI
 - Street Address
 - City
 - State
 - Country
 - Postal Code
 - Type of Operation(s)
- **Establishment Contact**
 - Name
 - Mailing Address
 - City
 - State
 - Country
 - Postal Code
 - Telephone Number
 - Email Address

Establishment Registration Data (cont...)

- **US Agent**
 - Name
 - DUNS number
 - Telephone Number
 - Email Address
- **Importer (if applicable)**
 - Name
 - DUNS number
 - Telephone Number
 - Email Address

Types of Operations

- Acceptable types of operations for establishments:
 - API Manufacturer
 - ANALYSIS
 - MANUFACTURE
 - RECOVERY
 - RELABEL
 - REPACK
- Unacceptable types of operations for establishments:
 - IMPORT
 - UNITED STATES AGENT

(as of February 2009)

Importer

- *...under section 510(i)(1)(A) of the Act, the name of each importer that is known to the establishment (this means each U.S. company or individual in the United States that is an owner, consignee, or recipient, of the foreign establishment's drug, that is imported into the United States. An importer does not include the consumer or patient who ultimately purchases, receives, or is administered the drug, unless the foreign establishment ships the drug directly to the consumer or patient.); and the name of each person who imports or offers for import (this means the name of each agent, broker, or other entity, other than a carrier, that the foreign drug establishment uses to facilitate the import of their drug into the United States).*

(from “Guidance for Industry: Providing Regulatory Submissions in Electronic Format – Drug Establishment Registration and Drug Listing”)

Importer cont...

- May or may not be an importer for each foreign establishment

US Agent

- Submission of information about US Agent replaces the paper letter
- Each foreign establishment in an ER SPL should have a US agent

Establishment Registration

SPL Xforms

HL7 SPL - Establishment Registration v 0.71

Open Save As Save

Establishment Registration Preview

Document Information

Type of Document	ESTABLISHMENT REGISTRATION
ID	4ff69f20-6dc3-49ca-bb3c-0d589ff4c0b1
Set ID	118ec196-50d7-49b2-946a-831d29702818
Version Number	1
Effective Time	20080909

example(YYYYMMDD)

Registrant

Name	Acme, Inc.
DUNS Number	2223334441

Registrant Contact

Name	Deborah Tyler
Mailing Address	222 Bonifant Avenue
City	Fort Washington
State	PA
Country	USA
Postal Code	35295
Telephone Number	tel:+1-800-435-4585
Email Address	mailto:deborah.tyler@acme.com

example(tel:+1-201-555-1212)
example(mailto:xportal@globalsubmit.com)

Establishment Registration

SPL Xforms cont...

Establishment		
Name	Acme Manufacturing, Inc.	
DUNS Number	475859252	
FEI	35295835928	
<input type="button" value="Add FEI"/> <input type="button" value="Delete FEI"/>		
Street Address	777 Sampson Street	
City	Mason	
State	PA	
Country	USA	
Postal Code	35859	
Type of Operation	manufacture ▼	
<input type="button" value="Add Type of Operation"/> <input type="button" value="Delete Type of Operation"/>		
Establishment Contact		
Name	Pam Jamison	
Mailing Address	777 Sampson Street	
City	Mason	
State	PA	
Country	USA	
Postal Code	35859	
Telephone Number	tel:+1-800-778-8359	example(tel:+1-201-555-1212)
Email Address	mailto:pam.jamison@acme.com	example(mailto:xportal@globalsubmit.com)
<input type="button" value="Add US Agent"/> <input type="button" value="Delete US Agent"/>		
<input type="button" value="Add Importer"/> <input type="button" value="Delete Importer"/>		

Establishment Registration

SPL Xforms cont...

Establishment	
Name	Acme International
DUNS Number	98583572
FEI	25835925829
<input type="button" value="Add FEI"/> <input type="button" value="Delete FEI"/>	
Street Address	33 Bleu Rue
City	Paris
State	
Country	FRA
Postal Code	20583
Type of Operation	manufacture
Type of Operation	analysis
<input type="button" value="Add Type of Operation"/> <input type="button" value="Delete Type of Operation"/>	
Establishment Contact	
Name	Etienne St. Champs
Mailing Address	33 Bleu Rue
City	Paris
State	
Country	FRA
Postal Code	20583
Telephone Number	tel:+33-538-5859
Email Address	mailto:etienne.st-champs@acme.com

example(tel:+1-201-555-1212)
example(mailto:xportal@globalsubmit.com)

Establishment Registration SPL Document

Product Information	
Product Type	ESTABLISHMENT REGISTRATION

Registrant - Acme, Inc. (2223334441)			
Contact	Address	Telephone Number	Email Address
Deborah Tyler	Address: 222 Bonifant Avenue City, State, Zip: Fort Washington, PA, 35295 Country: USA	+1-800-435-4585	deborah.tyler@acme.com

Establishment			
Name	Address	ID/FEI	Operations
Acme Manufacturing, Inc.	Address: 777 Sampson Street City, State, Zip: Mason, PA, 35859 Country: USA	475859252	manufacture
Contact	Address	Telephone Number	Email Address
Pam Jamison	Address: 777 Sampson Street City, State, Zip: Mason, PA, 35859 Country: USA	+1-800-778-8359	pam.jamison@acme.com

Establishment Registration

SPL Document cont...

	Country: FRA		
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Establishment			
Name	Address	ID/FEI	Operations
Acme International	Address: 33 Bleu Rue City, State, Zip: Paris, 20583 Country: FRA	98583572	manufacture, analysis
Contact	Address	Telephone Number	Email Address
Etienne St. Champs	Address: 33 Bleu Rue City, State, Zip: Paris, 20583 Country: FRA	+33-538-5859	etienne.st-champs@acme.com
US Agent (ID)	Address	Telephone Number	Email Address
Acme USA (359582424)		+1-800-999-5542	jacob.goodman@acme.com
Importer (ID)	Address	Telephone Number	Email Address
Franklin Imports (252597793)		+1-888-444-5835	paula.johansen@franklin.com

Revised: 09/2008

Electronically Registered Drug Establishments

- Example of actual Drug Firms Annual Registration Status Website Display

Pfizer approved use of their name in presentation

Website address: <http://www.fda.gov/cder/dfars/docs/querydrls.htm>

Pfizer Ireland Pharmaceuticals	3003047405	300348730	Loughbeg Ringaskiddy, County Cork IRL	2008
Pfizer Ireland Pharmaceuticals	3003348730	986948909	Pottery Road, Dun Laoghaire Dublin IRL	2008
Pfizer Ireland Pharmaceuticals	3003382089	989811526	Little Island Cork IRL	2008
Pfizer Ireland Pharmaceuticals	3003882524	896090987	Ringaskiddy API Plant Cork IRL	2008
Pfizer Italia S.r.l.	3003637173	431227388	63046 Marino Del Tronto Ascoli Piceno (AP) ITA	2008
Pfizer Japan Inc	1000172081	705466860	Aza 5-Gochi, 2-banchi, Taketoyo-cho Chita-gun, Aichi-Ken Nagoya 470-2393 JPN	2008
Pfizer Laboratories Div Pfizer	1810508	006050075	100 Pfizer Drive, Kenilworth, NJ 07033 USA	2008

Initial Establishment Registration Submission

- Initial electronic submission for establishments already registered
 - Registrants include information for **all** of their establishments in one *Establishment Registration* SPL file. Each establishment is in only one **ER** SPL file.
 - If establishment is included in another **ER** SPL w/different setID, SPL will FAIL validation

Electronically Requesting an FEI Number

- Request an FEI Number using SPL
 - Include all establishments in one file.
 - Add the FEI numbers for all of the previously registered establishments (registered in paper or electronic format)
 - Include information for new establishment (leave FEI number field empty)
 - Request for FEI will be routed to appropriate FDA team

Correcting an ER SPL with Validation Error

- Correct SPL file validation error
 - If an SPL file cannot be processed because of a validation error, a report on the validation error is sent from FDA to the contact person. Open the SPL file and correct the errors.
- ***SPL file **never** made it into the FDA eList system***

Correcting Mistake in Valid SPL Just Submitted

- Correct a mistake in an SPL file just submitted
 - Open the SPL file, correct the mistake,
 - Use
 - **new id root**
 - **new version number**
 - **original setId root**
 - appropriate effective time.
- ***SPL file was **valid** and loaded into FDA eList system

Updating an ER SPL

- Update information for an **electronically** registered establishment
- Update anytime during year **or** for annual registration
 - Open the previous SPL file and fill in the new information **without changing the other existing information.**
 - Use
 - new id root
 - new version number
 - original setId root
 - appropriate effective time.

Adding a New Establishment

- Add a new establishment to your ER SPL file:
 - Open the previous SPL file
 - Fill in the information on a new establishment **without changing the information on the other establishments.**
 - Use
 - **new** id root
 - **new** version number
 - **original** setId root
 - appropriate effective time.

Removing an Establishment

- Remove a previously **electronically** registered establishment
 - Open the previous ER SPL file, **without changing the existing information on the other establishments**, and remove the specific establishment information.
 - Use
 - **new** id root
 - **new** version number
 - **original** setId of your ER SPL
 - appropriate effective time.

Establishment Re-Registration No Changes

- Simple process for annually re-registering establishments which have no changes
- Must have already **electronically** registered the establishments once.
- Submit No Change Notification SPL

Establishment Re-Registration

No Changes

- No changes to registration information
 - Each year when the information is updated, if there is no change:
 - Create an SPL file with the *document type* **No change notification** with a **new** id root and **new** version number with the **original** setId and the appropriate effective time.
 - Registrant and establishment information is **not** included with an SPL file with the *document type* **No change notification**.

Establishment

No Change Notification SPL

Product Information	
Product Type	NO CHANGE NOTIFICATION

Revised: 04/2008

Going Out of Business?

- Registrant goes out of business
 - If the registrant goes out of business, create an SPL file with the *document type* **Out of business notification** using a **new** id root and **new** version number with the **original** setId and the appropriate effective time. Registrant and establishment information is not included with an SPL file with the *document type* **Out of business notification**.
 - Applicable for registrants who electronically registered establishments

Establishment Out of Business Notification

Product Information	
Product Type	OUT OF BUSINESS NOTIFICATION

Revised: 09/2008

Certified 2656 Paper Form?

- No certified paper forms for e-registered establishments
- Check DFARS website for electronically registered establishments

ER SPL Notes

- In eReg & eList system for current relationship (for paper) between labeler code & establishment is non-existent
- Entering provinces - The province, "BC", goes in the <state> tag.
- No limit to amount of importers
- No limit to number of establishments in one SPL
- Use "USA" as the country code for Puerto Rico

Common Errors in Establishment Registration SPL

- Incorrect telephone format
- Wrong e-mail format
- Including registrant and establishment information & coding in a “No Change Notification” SPL document.
- Incorrect ISO-3166 Country Code
- Mismatch for DUNS Number & Establishment name
- Files uploaded to Gateway without a folder

Test Your SPL R4 Submissions

- Use Pragmatic Data Validator Lite to test your SPL files prior to transmission to FDA:

<http://www.fda.gov/ForIndustry/DataStandards/ucm155514.htm>

SPL-related Technical Assistance/Questions

- SPL e-mail account (spl@fda.hhs.gov)

Stay Informed

- Join FDA Data Standards Council listserv
- <http://www.fda.gov/ForIndustry/DataStandards/default.htm>



The screenshot shows the FDA Data Standards Council website. At the top is a blue header with the U.S. Department of Health & Human Services logo and the URL www.hhs.gov. Below this is the FDA logo and the text "U.S. Food and Drug Administration". A navigation bar contains links for Home, Food, Drugs, Medical Devices, Vaccines, Blood & Biologics, Animal & Veterinary, Cosmetics, Radiation-Emitting Products, and Tobacco Products. A search bar and an "A-Z Index" button are also present. The main content area is titled "For Industry" and includes a breadcrumb trail: Home > For Industry > Data Standards. On the left is a sidebar with a "Data Standards" menu containing links for Validators, Data Council, Structured Product Labeling, Individual Case Safety Reports, and Regulated Product Submission. The main content area is titled "FDA Resources for Standards" and features a sign-up link for email updates, a paragraph describing the council's role, and a link for Structured Product Labeling.

U.S. Department of Health & Human Services

www.hhs.gov

FDA U.S. Food and Drug Administration

A-Z Index Search go

Home | Food | Drugs | Medical Devices | Vaccines, Blood & Biologics | Animal & Veterinary | Cosmetics | Radiation-Emitting Products | Tobacco Products

For Industry Email this page ☐ Print this page ☐ Change Font Size ☐ ☐

Home > For Industry > Data Standards

Data Standards

- Validators
- Data Council
- Structured Product Labeling
- Individual Case Safety Reports
- Regulated Product Submission
- CDISC Data Standards

FDA Resources for Standards

 Sign up for email updates. ←

The FDA Data Standards Council coordinates the evaluation, development, maintenance, and adoption of health and regulatory data standards to ensure that common data standards are used throughout the agency.

[Structured Product Labeling](#)

Questions

Thank you!